

Environmental Protection Agency

§ 1065.805

V_{mix} = Total dilute exhaust flow volume flow in m^3 per test segment corrected to 20°C and 101.3 kPa.

C_i = The concentration of species i , in ppm or ppmC, corrected for background contribution according to the equation in paragraph (b)(2) of this section.

f_{di} = The density factor for species i . The density factors are 576.8 g/m^3 for THC, 1913 g/m^3 for NO_x , and 1164 g/m^3 for CO.

(2) The equation to calculate C_i is:

$$C_i = C_{\text{sample}} - C_{\text{background}} [1 - (1/DF)]$$

Where:

C_{sample} = Concentration of species i in the diluted exhaust sample, in ppm or ppmC.

$C_{\text{background}}$ = Concentration of species i in the dilution air background sample, in ppm or ppmC.

DF = Dilution factor, as calculated in paragraph (a) of this section.

(c) Calculate total brake work (kW-hr) done during the emissions sampling period of each segment or mode.

(d) Calculate emissions in g/kW-hr by dividing the mass emission rate (g/test segment) by the total brake work for the test segment.

(e) Apply deterioration factors or other adjustment factors to the brake-specific emission rate in paragraph (e) as specified in the standard-setting part.

EFFECTIVE DATE NOTE: At 69 FR 39262, June 29, 2004, § 1065.615 was amended by revising paragraphs (c), (d) and (e), effective Aug. 30, 2004. For the convenience of the user, the revised text is set forth as follows:

§ 1065.615 Bag sample calculations.

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(c) Calculate total brake work (kW-hr) done during the emissions sampling period of each segment or mode and then weight it by the applicable test cycle weighting factors.

(d) Calculate emissions in g/kW-hr by dividing the total weighted mass emission rate (g/test) by the total cycle-weighted brake work for the test.

(e) Apply deterioration factors or other adjustment factors to the brake-specific emission rate in paragraph (d) of this section, as specified in the standard-setting part.

§ 1065.620 Continuous sample analysis and calculations.

Use the sample analysis procedures and calculations of 40 CFR part 86, subpart N, for continuous samples.

[69 FR 39262, June 29, 2004]

EFFECTIVE DATE NOTE: At 69 FR 39262, June 29, 2004, § 1065.620 was added to subpart G, effective Aug. 30, 2004.

Subpart H—Particulate Measurements

§ 1065.701 Particulate measurements.

Use the particulate sampling system and procedures specified in 40 CFR part 86, subpart N, to measure particulate emissions from compression-ignition nonroad engines.

[69 FR 39262, June 29, 2004]

EFFECTIVE DATE NOTE: At 69 FR 39262, June 29, 2004, § 1065.701 was added to subpart G, effective Aug. 30, 2004.

Subpart I—Testing With Oxygenated Fuels

§ 1065.801 Applicability.

(a) This subpart applies for testing with oxygenated fuels. Except where specified otherwise in the standard-setting part, compliance with this subpart is not required for fuels that contain less than 25 percent oxygenated compounds by volume. For example, you generally would not need to follow the requirements of this subpart for tests performed using a fuel that was 10 percent ethanol and 90 percent gasoline, but you would need to follow these requirements for tests performed using a fuel that was 85 percent ethanol and 15 percent gasoline.

(b) This subpart specifies sampling procedures and calculations that are different than those used for non-oxygenated fuels. The other test procedures of this part apply for testing with oxygenated fuels.

§ 1065.805 Sampling system.

(a) Use the sampling procedures specified in 40 CFR part 86 for methanol and formaldehyde to measure alcohols and aldehydes in the exhaust. This requires the following:

(1) Bubbling a sample of the exhaust through water to collect the alcohols.

(2) Passing a sample of the exhaust through cartridges impregnated with 2,4-dinitrophenylhydrazine to measure aldehydes.